

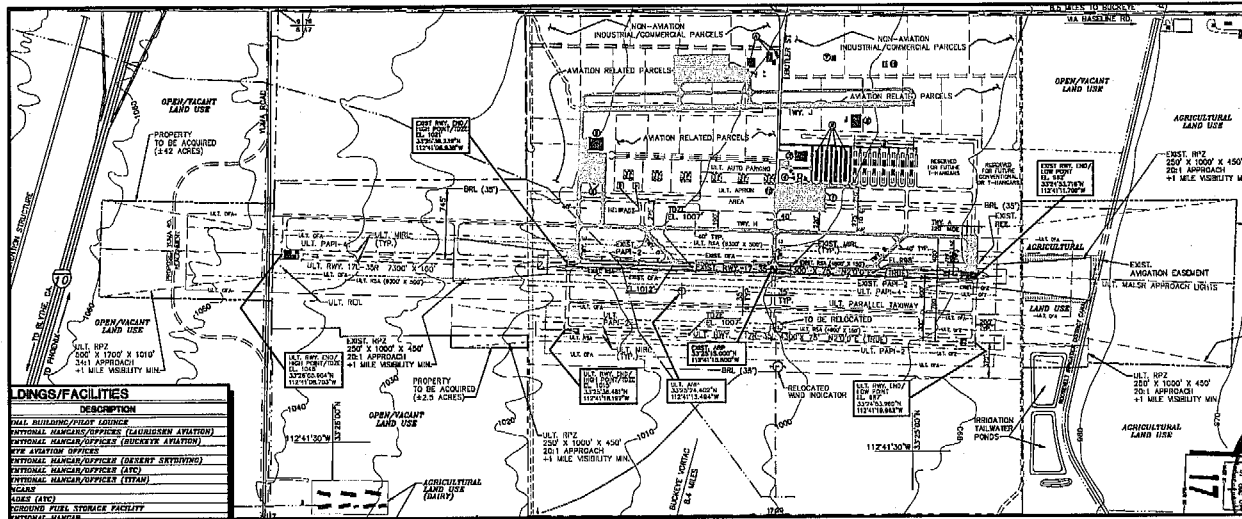


Chapter Five

AIRPORT PLANS

Chapter Five

AIRPORT PLANS



In the previous chapter, an evaluation was made of future options for airfield and landside development. This resulted in the evolution of a concept for future airport improvements that could best serve the planning horizon levels identified earlier in the process. The purpose of this chapter is to describe in narrative and graphic form, the recommended direction for future development.

A set of plans, referred to as **Airport Layout Plans**, has been prepared to graphically depict the recommendations for airfield layout, disposition of obstructions, and future use of land on the airport. This set of plans includes:

- Airport Layout Plan
- Part 77 Airspace Plan and Approach Profiles
- Runway Protection Zone Plans and Profiles

- Terminal Area Plan
- On-Airport Land Use Plan
- Airport Property Map

The airport layout plan set has been prepared on a computer-aided drafting system for future ease of use. The computerized plan set provides detailed information of existing and future facility layout on multiple layers that permit the user to focus in on any section of the airport at any desirable scale. The plan can be used as base information for design, and can be easily updated in the future to reflect new development and more detail concerning existing conditions as made available through design surveys. The plan set is also being provided in 24-inch x 36-inch reproducible hard copy in accordance with current ADOT and FAA standards.

AIRPORT DESIGN STANDARDS

FAA Advisory Circular 150/5300-13 **Airport Design** outlines recommended design standards for airports. These design standards are based upon the characteristics of the airplanes that the airport is expected to serve on a regular basis. Most critical to airport design are the weight, wingspan and approach speed of the design aircraft. An airport's reference code (**ARC**) is based upon a combination of the aircraft approach category and the airplane design group (**ADG**).

The aircraft approach category is a grouping of aircraft based upon 1.3 times their stall speed in their landing configuration at their maximum certificated landing weight. The categories are as follows:

- Category A: Speed less than 91 knots.
- Category B: Speed 91 knots or more but less than 121 knots.
- Category C: Speed 121 knots or more but less than 141 knots.
- Category D: Speed 141 knots or more but less than 166 knots.
- Category E: Speed 166 knots or more.

The airplane design group is a grouping of airplanes based on wingspans. The groups are as follows:

- Group I: Up to but not including 49 feet.
- Group II: 49 feet up to but not including 79 feet.

- Group III: 79 feet up to but not including 118 feet.
- Group IV: 118 feet up to but not including 171 feet.
- Group V: 171 feet up to but not including 214 feet.
- Group VI: 214 feet up to but not including 262 feet.

The critical design aircraft at Buckeye Municipal Airport over the long range planning horizon will be corporate aircraft that fall within Approach Category D and Design Group II, up to and including the Gulfstream IV. The design standards used for Buckeye Municipal Airport are summarized in **Table 5A**.

AIRPORT LAYOUT PLAN

The Airport Layout Plan (ALP) drawing graphically presents the existing and ultimate airport layout. It depicts the recommended improvements which will enable the airport to meet the planning horizon demand levels. The detailed airport and runway data are provided to facilitate the interpretation of the master plan recommendations. All-weather wind coverage is also provided.

The Airport Layout Plan (**Drawing No. 1**) depicts airport improvements associated with both the airfield and landside areas. The improvements on the landside are illustrated in more detail and in a larger scale on the Terminal Area Plan drawing and are discussed later in this chapter.

Runway 17-35 is currently 4,300 feet long, 75 feet wide, and is strength rated

at 12,500 pounds single wheel gear loading (SWL). Analysis of facility requirements indicated the need for an additional 3,000 feet of runway in order to accommodate business jets which are projected to utilize the airport on a regular basis within the long range of the planning period. Alternative runway extensions were analyzed in the

previous chapter, with Runway Extension Alternative A (3,000 foot northerly extension) being ultimately considered the best alternative. The 3,000 foot extension to the north will require re-routing Yuma Road and the purchase of approximately 42 acres to accommodate the runway protection zone (RPZ) to the north.

TABLE 5A
Airfield Planning Design Standards
Buckeye Municipal Airport

| Component | Runway 17L-35R | | Runway 17R-35L |
|--------------------------------|----------------|------------|----------------|
| Reference Code | D-II | | B-II |
| Runway | | | |
| Length (ft.) | 7,300 | | 4,300 |
| Width (ft.) | 100 | | 75 |
| Strength (lbs.) | 75,000 DWL | | 12,500 SWL |
| Safety Area | | | |
| Width (ft.) | 500 | | 150 |
| Length Beyond Runway End (ft.) | 1,000 | | 300 |
| Object Free Area | | | |
| Width (ft.) | 800 | | 500 |
| Length Beyond Runway End (ft.) | 1,000 | | 300 |
| Taxiways | | | |
| Width (ft.) | 40 | | 35 |
| Runway Protection Zones | 17L | 35R | |
| Inner Width (ft.) | 500 | 1,000 | 250 |
| Length (ft.) | 1,700 | 2,500 | 1,000 |
| Outer Width (ft.) | 1,010 | 1,750 | 450 |
| Approach Slope | 34:1 | 50:1 | 20:1 |

SWL - Single Wheel Loading
DWL - Dual Wheel Loading

Consideration was also given to an extension of the runway without disturbing the Roosevelt Irrigation Canal or Yuma Road. Because FAA requires a cleared and graded runway safety area (RSA) extending 1,000 feet

beyond the end of the runway for Category D aircraft, the maximum runway length which could be achieved without affecting Yuma Road or the Roosevelt Irrigation District would be 6,450 feet. This length falls well short

of FAA requirements for the full range of business jets (7,300 feet). For planning purposes a 7,300 foot runway is depicted on the ALP.

Facility requirements analysis also indicated that the runway should be widened to 100 feet and the runway strength should be increased to 75,000 pounds dual wheel gear loading (DWL) to meet the requirements of the critical aircraft over the long range planning horizon.

Airfield capacity analysis conducted in Chapter Three indicated the need for additional airfield capacity to meet the demands of the long range planning horizon. It was determined that a parallel runway designed to accommodate primarily training operations would best serve this long range need. Thus, parallel Runway 17R-35L, measuring 4,300 feet by 75 feet, has been included on the ALP. Because the runway is designed to accommodate small aircraft, the pavement strength has been planned for 12,500 pounds single wheel loading (SWL).

As mentioned in the previous chapter, the FAA is in the process of developing stand-alone global positioning system (GPS) approaches for airports across the country. The schedule includes certifying approximately 500 new GPS approaches per year through 2001. Once the GPS approaches are in place, the existing navigational aid system will begin to be phased out. The FAA schedule calls for NDB's to be phased out between the years 2000 and 2005. VOR's, DME, and CAT I ILS equipment

will be phased out between the years 2005 and 2010.

Runway 17-35 is not currently served by an instrument approach. Because the airport could be served by GPS in the future, plans for a precision instrument approach have been considered. In order to accommodate visibility minimums of one-half mile and 200 foot cloud ceilings, a medium intensity approach light system with runway alignment indicator lights (MALSR) is required. Thus, the ALP drawing depicts the layout of a MALSR on existing Runway 35. Runway 17 has been planned for GPS approaches with not lower than one mile visibility, thus, runway end identifier lights (REIL's) have been planned as well. The parallel runway has been planned for visual approaches to both ends. The current PAPI-2 system has been planned for upgrade to a four box system to meet the needs of larger aircraft.

Taxiway improvements include the extension of the existing parallel taxiway to mirror the runway extension. Additional exit taxiways have also been planned to serve the existing runway. A parallel taxiway located between the existing and parallel runway has been planned to enhance operational efficiency. Three exit taxiways have been planned for the parallel runway.

Improvements are also depicted on the ALP for the required runway safety area (RSA). Because the existing runway is planned to be served by ARC D-II aircraft, the FAA requires a cleared and graded RSA 250 feet on either side

of the runway centerline extending 1,000 feet beyond the runway end.

Discussion in the previous chapter indicated the current use of the airport by specialized sectors of aviation. Currently, a portion of the abandoned original runway (east, and behind the terminal area) is being utilized by ultralight aircraft. Also, a drop area for the airport parachute training operator is located just west of Palo Verde Road, north of Butler Street.

Consideration of the ultimate operation by ultralight aircraft and the parachute drop zone was given in the previous chapter. It was determined that as the airport becomes increasingly utilized and operations increase (especially by corporate aircraft), consideration for alternative locations for these activities would become necessary. As operational levels near the long range demand level, safety concerns regarding operational conflicts could require that the drop zone and ultralight aircraft operation area be relocated to another location/airport.

Currently, the airport is not utilized on a regular basis or supported by fixed facilities specifically designed for helicopters. The forecast chapter indicated that the airport will be increasingly utilized by rotorcraft in the future. Furthermore, the airport could serve as a base for a helicopter training operator or med-evac type service. Thus, the ALP reflects the ultimate location for a helicopter operation (including helipads) to the north of the existing terminal area, just south of Airline Training Center's leasehold.

AIRSPACE PLANS

Three drawings (**Drawings Nos. 2, 3, and 4**) in the plan set provide varying levels of detail on the airspace associated with ultimate development at Buckeye Municipal Airport. These include the F.A.R. Part 77 Airspace Plan and Runway Approach Profiles, and the Inner Portion of the Approach Surface Drawings.

PART 77 AIRSPACE PLAN

The Part 77 Airspace Plan depicted on **Drawing No. 2** of the ALP set reflects Part 77 critical surfaces for Buckeye Municipal Airport. It is based on Federal Aviation Regulations (F.A.R.) Part 77, **Objects Affecting Navigable Airspace**. F.A.R. Part 77 has been established to protect the airspace and approaches to each runway from hazards which could affect the safe and efficient operation of aircraft. These federal criteria have also been established for use by local jurisdictions in controlling the height of objects in the vicinity of the airport. For example, Part 77 drawings can be utilized in zoning ordinances to enhance area land use compatibility.

The drawings are also used to indicate potential obstructions which are located within the imaginary surfaces of the airport. Ideally, the obstruction should be removed or lowered beneath the imaginary Part 77 surfaces. Remaining obstructions must be reviewed by the Federal Aviation Administration to determine if they will seriously impact aircraft operations.

There are several critical imaginary surfaces which categorize the airspace around an airport. Each runway at Buckeye Municipal Airport has a primary and transitional surface that connects to horizontal and conical surfaces. The surface heights, angles and radii for each of these surfaces are determined by the type of runway and its instrumentation. Each of these surfaces are described in the following subsections.

Primary Surface

The primary surface is the imaginary surface immediately surrounding the runway. It extends 200 feet beyond each runway end, and its width depends on the type of runway approach capability (visual, non-precision or precision). In addition, the elevation of the primary surface is the same as the elevation along the associated part of the runway.

With a planned precision instrument approach on the south end, Runway 17-35 has a primary surface that is 1,000 feet wide, centered on the runway. The primary surface for Runway 17-35 will be 7,500 feet in length.

The planned parallel runway would have a visual approach and a primary surface that is 4,500 feet long and 250 feet wide, centered on the runway.

Situated adjacent to the runway and taxiway system, the primary surface should remain clear of most objects in order to allow unobstructed passage of aircraft. Within the primary surface, objects are only permitted if they are

fixed by function. PAPI's, glide slope antennae and their equipment shelters are examples of such objects within the category of "fixed by function".

Analysis indicates that the primary surface at Buckeye Municipal Airport is free from obstructions except those that are fixed by function.

Approach Surface

An approach surface is also established for each runway approach. The approach surface has the same inner width as the primary surface, and then widens as it rises upward and outward along the extended runway centerline from the primary surface. The slope of the rise and the length of the approach surface is dictated by the type of approach available to the runway (visual, non-precision or precision), and by the approach category of the aircraft for which the runway is designed.

At Buckeye Municipal Airport, Runway 35R is planned for a precision instrument approach and the Runway 17L approach is planned as nonprecision. The approach surface for Runway 35R extends 10,000 feet from the primary surface, and rises at a slope of one foot vertically for each 50 feet of horizontal distance (50:1). Then, between 10,000 feet and 50,000 feet from the beginning of the primary surface, the approach surface rises at a 40:1 slope to an ultimate elevation which is 1,200 feet above the airport elevation. The width of the approach surface at 10,000 feet from the primary surface is 4,000 feet, and is 16,000 feet

wide at a distance of 50,000 feet from the primary surface.

Runway 17L has a planned nonprecision approach surface which extends to 10,000 feet from the primary surface. The approach slope for a nonprecision approach rises at a rate of one foot vertically for each 34 feet horizontally (34:1). The inner width of the approach surface is 1,000 feet, whereas the width of the approach surface at 10,000 feet from the primary surface is 3,500 feet.

The parallel runway is planned with visual approaches at both ends. The visual approach surface extends for 5,000 feet from the primary surface. The approach slope rises at a rate of one foot vertical to 20 feet horizontal. The inner width is 250 feet, and the outer width is 1,250 feet.

Transitional Surface

The runway has a transitional surface that begins at the outside edge of the primary surface at the same elevation as the runway. The transitional surface also connects with the approach surfaces of each runway. The transitional surface rises at a slope of one foot vertically for each seven feet horizontal distance (7:1), up to a height which is 150 feet above the highest runway elevation. At that point, the transitional surface is replaced by the horizontal surface.

Horizontal Surface

The horizontal surface is established at 150 feet above the highest elevation on the runway. Having no slope, the horizontal surface connects the transitional and approach surfaces to the conical surface at a distance of 10,000 feet from the primary surface of Runway 17-35. At Buckeye Municipal Airport, the horizontal surface is currently at an elevation of 1,171 feet above mean sea level (MSL). The ultimate layout of the runway will increase the horizontal surface elevation to an elevation of 1,195 feet MSL.

Conical Surface

The conical surface begins at the outer edge of the horizontal surface. The conical surface then continues for an additional 4,000 feet horizontally at a slope of one foot rise for each 20 foot horizontal distance (20:1). Therefore, at 4,000 feet from the horizontal surface, the elevation of the conical surface is 350 feet above the highest airport elevation (currently 1,371 feet MSL, ultimately 1,395 feet MSL).

APPROACH PROFILES

The Runway Approach Profiles present profile views of the approach surfaces to each runway end. The profile views facilitate identification of obstructions

that lie within areas that should be free of objects which could endanger the safe flight of aircraft. As described previously, the approach surface has the same inner width as the primary surface, and then flares as it rises upward and outward along the extended runway centerline from the primary surface.

Sheet No. 3 includes the approach profiles of Runway 17L-35R. The planned precision approach surface for Runway 35R extends 10,000 feet from the primary surface, and rises at a 50:1 slope. Then, between 10,000 feet and 50,000 feet from the beginning of the primary surface, the approach surface rises at a 40:1 slope to an ultimate elevation which is 1,200 feet above the airport elevation. Analysis indicates there are no penetrations to the 50:1 surface or the 40:1 outer approach surface of the planned precision approach surface.

The planned nonprecision approach profile to Runway 17L, extends to 10,000 feet from the primary surface at an 34:1 approach slope. There are no obstructions to the Runway 17 approach path.

The visual approach profiles for planned parallel Runway 17R-35L are depicted on **Sheet No. 4**. These profiles extend for 5,000 feet from the primary surface at a 20:1 approach slope. There are no obstructions in the approaches to the planned parallel runway.

RUNWAY END AREA PLANS AND PROFILES

The **Runway End Area Plans and Profiles (Drawing No. 3 and No. 4)** present plan and profile views of the innermost portion of the approaches to, and departures from each runway end. The purpose of these drawings is to analyze the areas nearest the runway, especially the runway protection zone (RPZ) in order to determine if obstructions or incompatible land uses lie within these areas. The main function of the RPZ is to provide as clear an area as possible for aircraft takeoffs and landings. The drawing extends outward from the runway end to 100 feet above runway end elevation according to the approach slope planned for the runway (2,000 feet for 20:1 approach slope, 3,400 feet for 34:1 approach slope, and 5,000 feet for 50:1 approach slope).

Runway protection zones begin 200 feet before the runway threshold, and extend into the approach area. The distance which an RPZ extends into the approach area varies according to the runway instrument approach capabilities and whether aircraft using the runway are classified as small (less than 12,500 pounds) or large (greater than 12,500 pounds).

For Runway 35R, which is planned for a precision instrument approach, the RPZ has dimensions of 1,000 feet x

2,500 feet x 1,750 feet. The existing RPZ for visual approaches to Runway 35R has dimensions of 250 feet x 1,000 feet x 450 feet. The future RPZ for Runway 35R lies outside the existing airport property.

Runway 17L is presently served by a visual approach with RPZ dimensions of 250 feet x 1,000 feet x 450 feet. With the advent of GPS, it is prudent to plan for a nonprecision approach to Runway 17L. This will require maintaining RPZ dimensions of 1,000 feet x 1,700 feet x 1,010 feet. This future RPZ would extend beyond existing airport property.

The parallel runway is planned with RPZ's for visual approaches by small airplanes. The dimensions for each RPZ are 250 feet x 1,000 feet x 450 feet. A portion of these areas will fall outside of the existing airport property line. Avigational easements should provide control over development in these areas.

An obstruction table is included on the plan sheets to indicate the proposed disposition of any obstruction. There are no existing obstructions within any of the existing or future RPZ's at Buckeye Municipal Airport.

TERMINAL AREA PLAN

Drawing No. 5 depicts the Terminal Area Plan and represents a refinement of the selected development configuration for landside facilities at the airport. Much of the focus of the terminal area plan is providing adequate areas for aviation growth while utilizing additional space available for commercial/industrial

uses. The long range plan includes an enlarged terminal services area, additional aircraft parking, expansion of storage hangar areas, and space for development of additional FBO facilities.

The plan designates an area for developing an additional 70 T-hangar facilities. The construction of a large FBO/maintenance hangar directly north of the existing terminal building is also depicted. Aircraft parking apron is enhanced and enlarged to the north of the existing apron area. Business jet and smaller aircraft parking can be accommodated near the FBO hangar and T-hangar facilities. Automobile parking is provided within close proximity of desired destinations. The plan calls for the fuel farm to remain in its current position.

ON-AIRPORT LAND USE PLAN

The objective of the On-Airport Land Use Plan is to coordinate uses of the airport property in a manner compatible with the functional design of the airport facility. Airport land use planning is important for orderly development and efficient use of available space. There are two primary considerations for airport land use planning. These are, first, to secure those areas essential to the safe and efficient operation of the airport; and, second, to determine compatible land uses for the balance of the property which would be most advantageous to the airport and community.

The plan depicts the recommendations for ultimate land use development on the airport. The long range future plans for an area may differ from the current use of the property. In these areas, major expansion or improvements of the existing use should be discouraged. If expansion is needed, it should be directed to the appropriate use areas depicted on the Airport Land Use Plan.

The Airport Land Use Plan is depicted on **Sheet No. 6**. Several airport land use categories have been identified. They include airfield operations, aviation revenue support, non-aviation revenue support, open space/approach protection, and future aviation reserve. A brief description of the suggested land uses is provided below.

AIRFIELD OPERATIONS

The airfield operations area is the most critical category of land use since it includes all areas necessary for safe operation on the airside of the airport. The included items are runway and taxiway safety areas, runway approaches where clearance is not adequate to permit other uses, and areas where nav aids will be located. At Buckeye Municipal Airport, this includes the existing and proposed runways, associated taxiways and taxiway exits, and areas within the object free areas. A total of 337 acres has been dedicated to airfield operation areas.

AVIATION REVENUE SUPPORT

The aviation revenue support land use category consists of aircraft apron, fixed base operator (FBO) hangars, conventional hangars, aviation development parcels, and auto parking. These sites are primarily designed to store and service general aviation aircraft and their users.

General aviation uses are planned to extend along the entire flightline on the east side of the runway. FBO sites and conventional hangar sites are interspersed along the flightline. There is one area planned for T-hangar growth which extends south from the existing line of T-hangars. Aviation development sites/parcels will lie south (behind) the flightline. Aviation revenue support encompasses 163 acres of land.

NON-AVIATION REVENUE SUPPORT

This land use category consists of industrial or commercial activities that require or may be attracted to the airport location. These uses not only provide additional employment opportunities at the airport, but also can maximize use of the land for revenue generation to support the airport operation.

Commercial and industrial development (non-aviation related) is planned south of the flightline along Palo Verde Road.

Development of these areas was planned for industrial/commercial uses not requiring direct access to the airfield. Non-aviation revenue support has been planned for 54 acres of land at the Buckeye Municipal Airport.

OPEN SPACE/ APPROACH PROTECTION

This land use category is designed specifically to enhance safe approaches to the airport. These areas lie beyond the runway end, essentially encompassing the RPZ. It is important that the Town of Buckeye plan and develop these areas in a manner that will enhance safety both on the ground and in the air. It would be ideal to leave these areas open, however, uses which do not require the construction of tall structures or the gathering of people (i.e. parking lots, agriculture, etc.) would be allowable.

FUTURE AVIATION RESERVE

Areas dedicated to future aviation reserve are those areas not needed to meet the demands of long range planning period. However, changes in activity levels or rapid metropolitan growth out toward the airport may dictate the need for these areas in the future. Thus, these areas will remain reserved for such time as needs arise.

AIRPORT PROPERTY MAP

Sheet No. 7 depicts the Buckeye Municipal Airport Property Map. The

property map includes property deeded to the Town originally, property recently purchased, existing aviation easements, as well as proposed property acquisition required.

SUMMARY

The airport layout plan drawing set is designed to provide basic guidance for the Town of Buckeye in making decisions relative to future development at Buckeye Municipal Airport. The plan provides for development to satisfy both short-term and long-term needs. Flexibility will be a key to future development as demands are not likely to occur exactly as forecast. The plan has considered demands that could be placed upon the airport over at least a twenty-year period to ensure the facility is capable of accommodating a variety of circumstances. As a result, the airport will serve to meet the demands of corporate-type aircraft as well as the full range of general aviation aircraft.

The Part 77 Airspace Plan should be used as a tool to evaluate the potential impacts the heights of future structures or antennae in the area could have on the airport's operational viability. Following the general recommendations of the plan, the Town of Buckeye can maintain the long-term viability of the airport and continue to provide a first-class general aviation facility for the region.

AIRPORT MASTER PLAN



BUCKEYE, ARIZONA

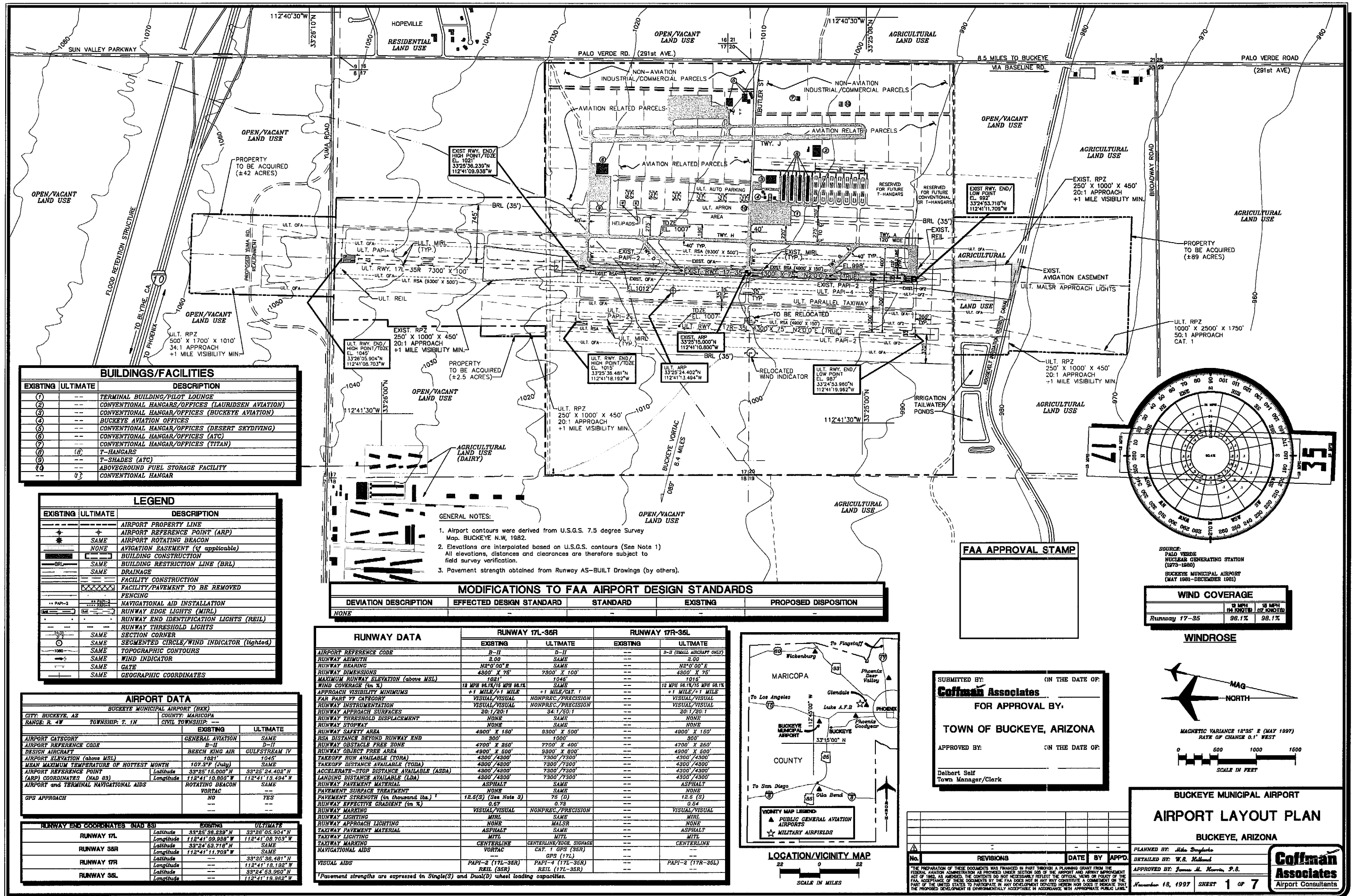
AIRPORT LAYOUT PLANS

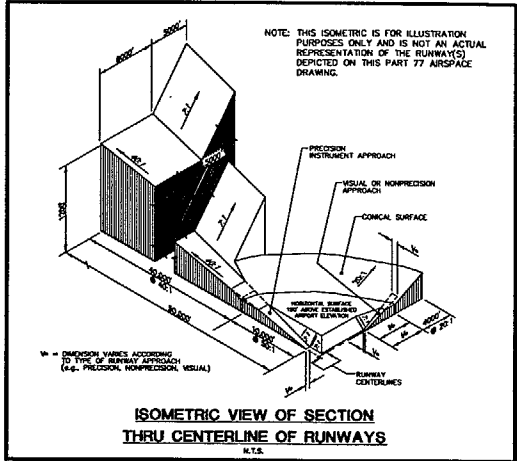
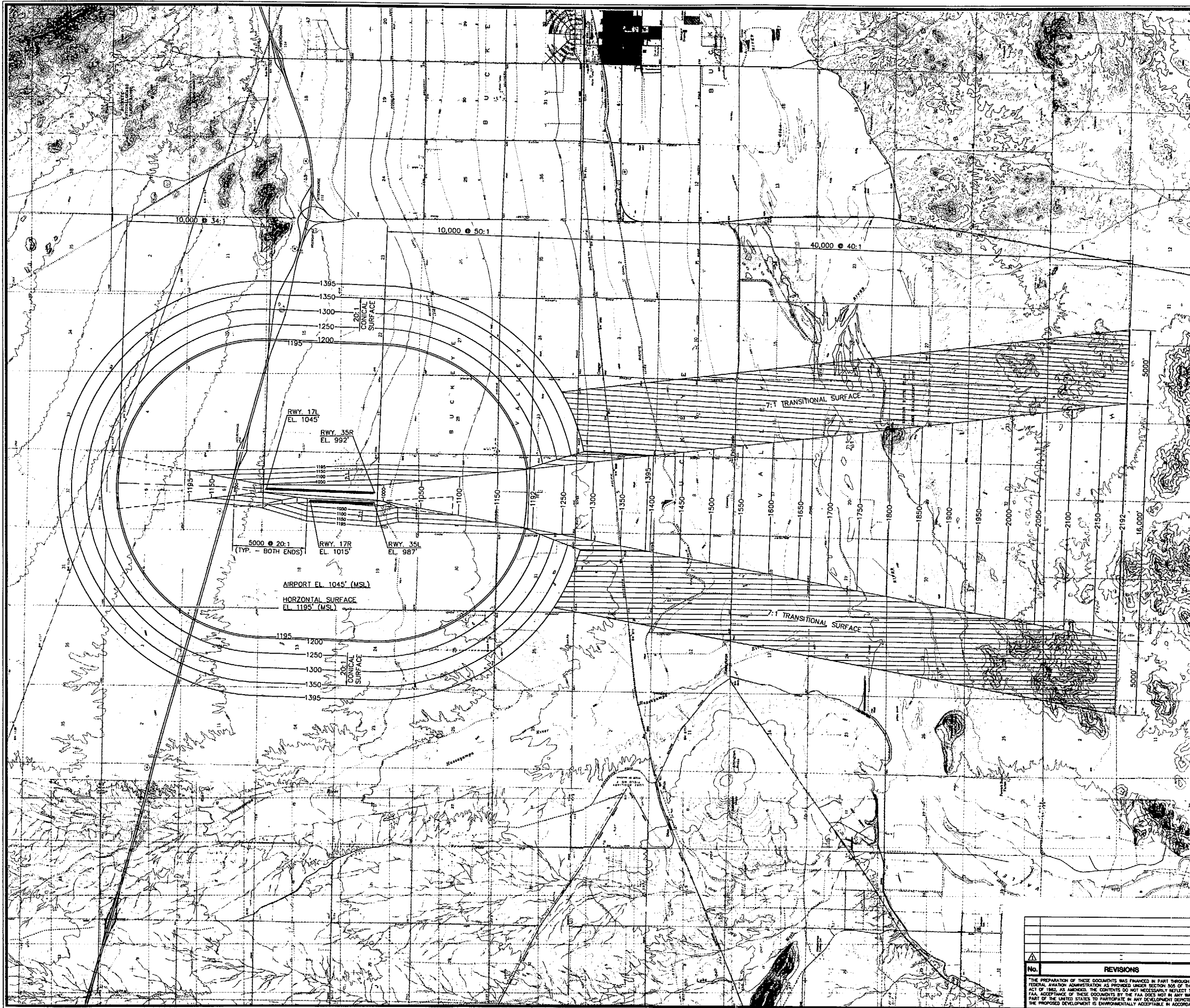
INDEX OF DRAWINGS

1. AIRPORT LAYOUT PLAN
2. PART 77 AIRSPACE PLAN
3. RUNWAY 17L-35R
APPROACH ZONES PROFILES AND
RUNWAY END AREA PLANS
4. RUNWAY 17R-35L
APPROACH ZONES PROFILES AND
RUNWAY END AREA PLANS
5. TERMINAL AREA PLAN
6. ON-AIRPORT LAND USE PLAN
7. AIRPORT PROPERTY MAP

AIP #3-04-0005-06

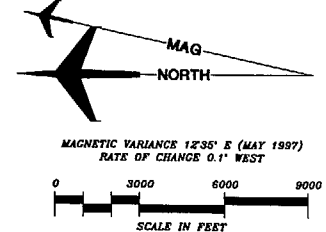






| OBSTRUCTION TABLE | | | | | |
|---|------------------|----------------------------|-------------------|--------------------|-----------------------------|
| Object Description | Object Elevation | Obstructed Part 77 Surface | Surface Elevation | Object Penetration | Proposed Object Disposition |
| NO OBSTRUCTIONS NOTED WITHIN ANY PART 77 AIRSPACE SURFACE | | | | | |

- GENERAL NOTES:
- Obstructions, clearances, and locations are calculated from ultimate runway and elevations and ultimate approach surfaces, unless otherwise noted.
 - Depiction of features and objects within the outer portion of the approach surfaces, are illustrated on the APPROACH ZONES PROFILES, Sheets 3 and 4 of these plans.
 - Depiction of features and objects within the inner portion of the approach surfaces, are illustrated on the RUNWAY END AREA PLANS, Sheets 3 and 4 of these plans.
 - Existing and future height and hazard ordinances are to be amended and/or referenced upon approval of updated PART 77 AIRSPACE PLAN.

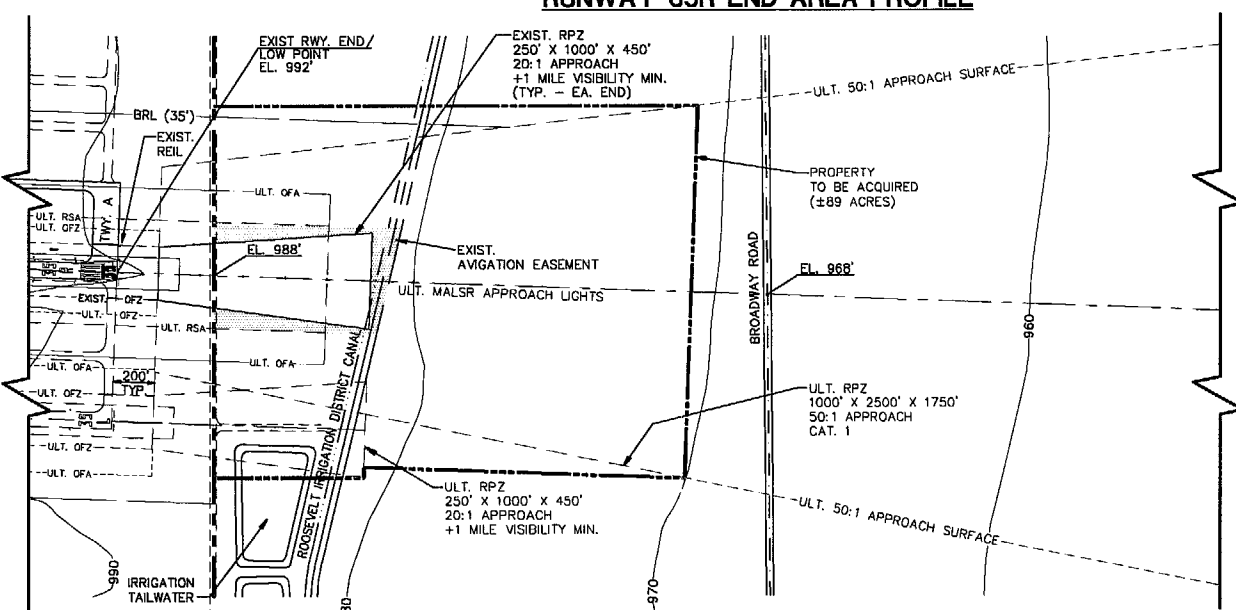
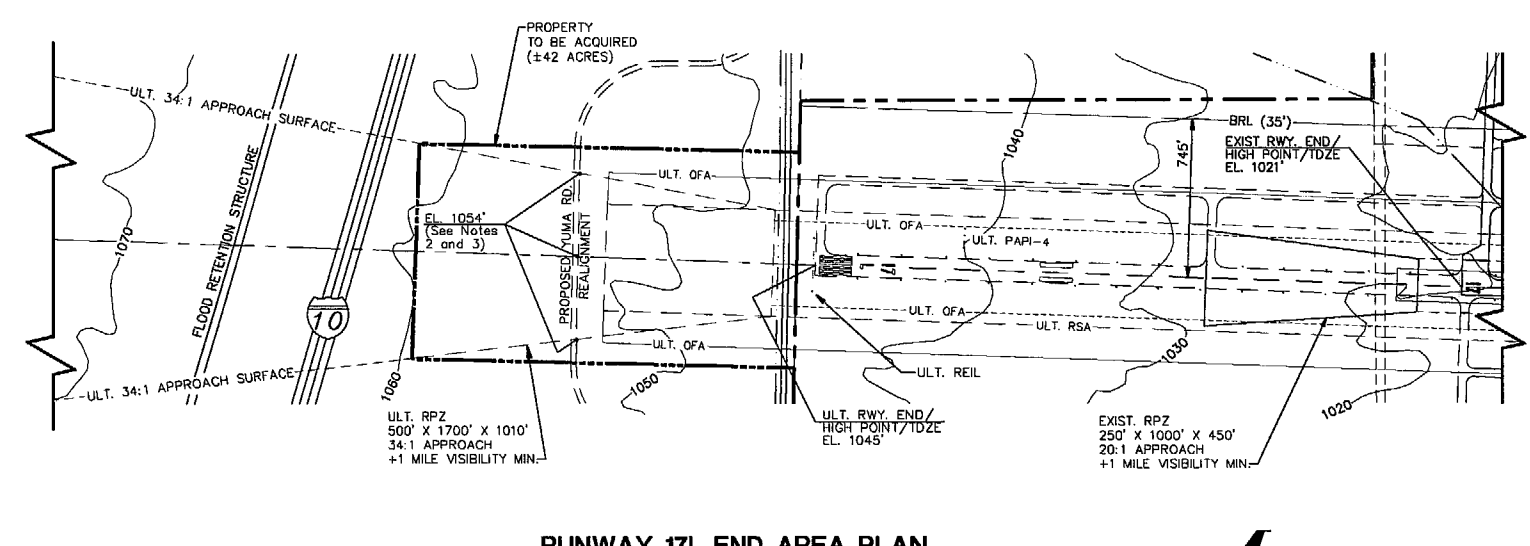
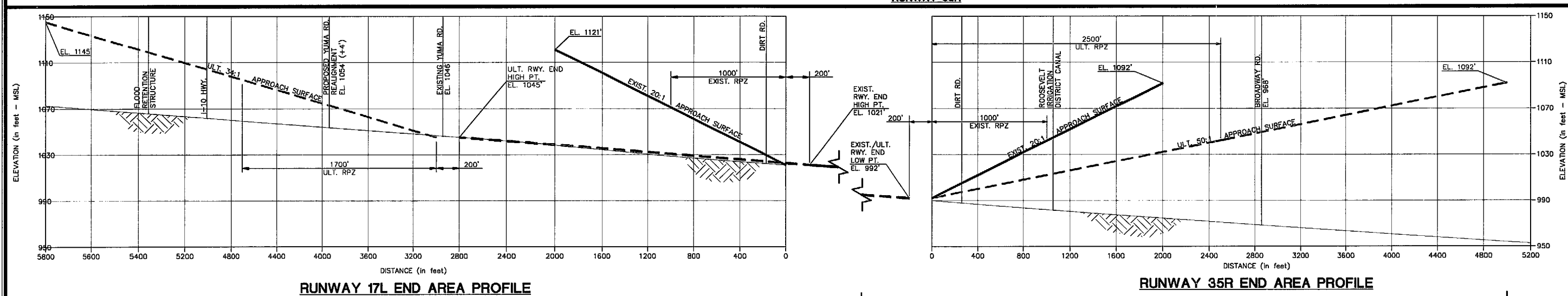
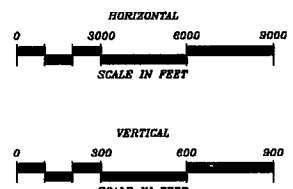
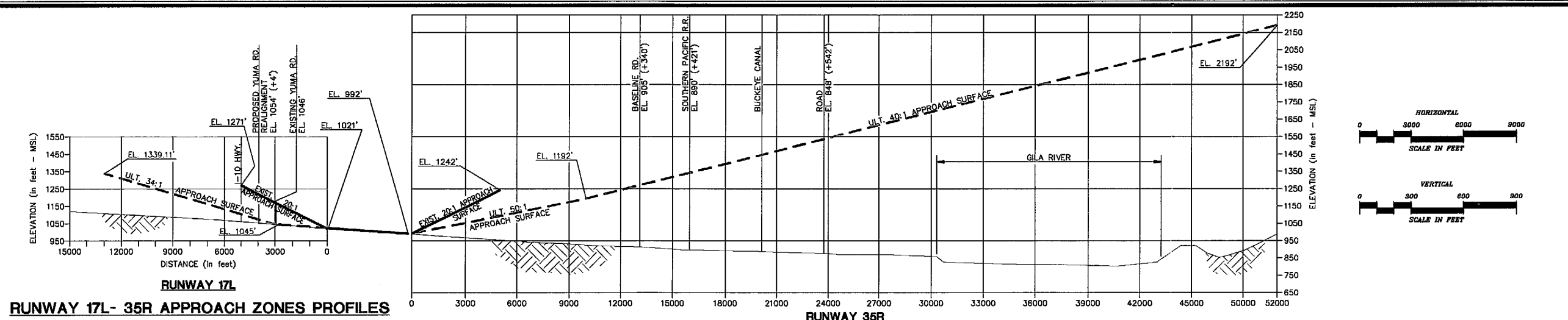


| REVISIONS | | | |
|-----------|------|----|--------|
| No. | DATE | BY | APP'D. |
| | | | |
| | | | |

BUCKEYE MUNICIPAL AIRPORT
PART 77 AIRSPACE PLAN
BUCKEYE, ARIZONA

PLANNED BY: *John Douglas*
DETAILED BY: *W.S. Kelland*
APPROVED BY: *James M. Morris, P.E.*
May 22, 1997

Coffman Associates
Airport Consultants



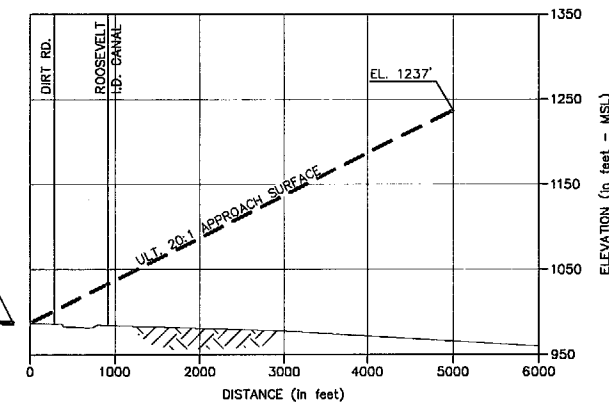
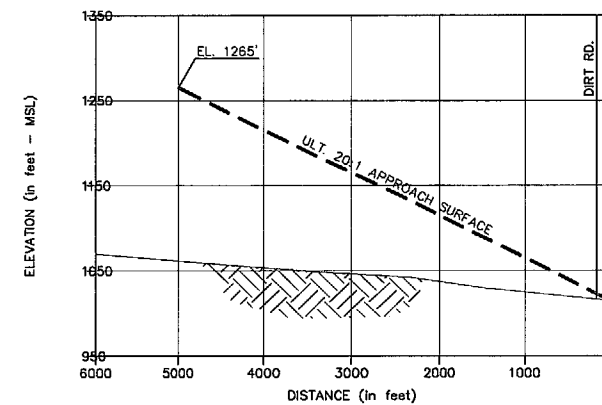
- GENERAL NOTES:**
- Obstructions, clearances, and locations are calculated from ultimate runway end elevations and ultimate approach surfaces, unless otherwise noted.
 - Airport contours were derived from U.S.G.S. 7.5 degree Survey Map, BUCKEYE N.W. 1982.
 - Elevations are interpolated based on U.S.G.S. contours (See Note 2). All elevations, distances and clearances are therefore subject to field survey verification.

**BUCKEYE MUNICIPAL AIRPORT
RUNWAY 17L-35R
APPROACH ZONES PROFILES AND
RUNWAY END AREA PLANS
BUCKEYE, ARIZONA**

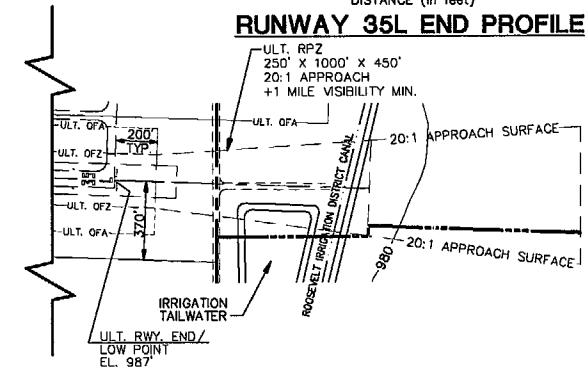
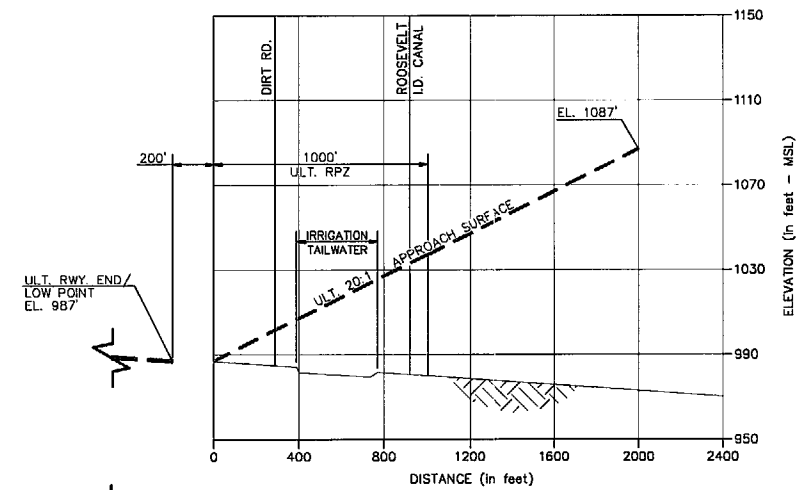
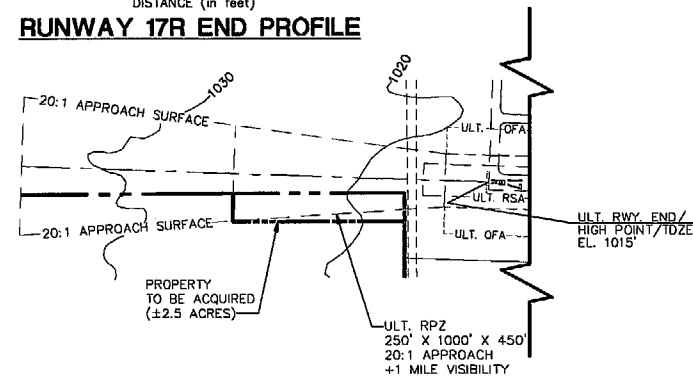
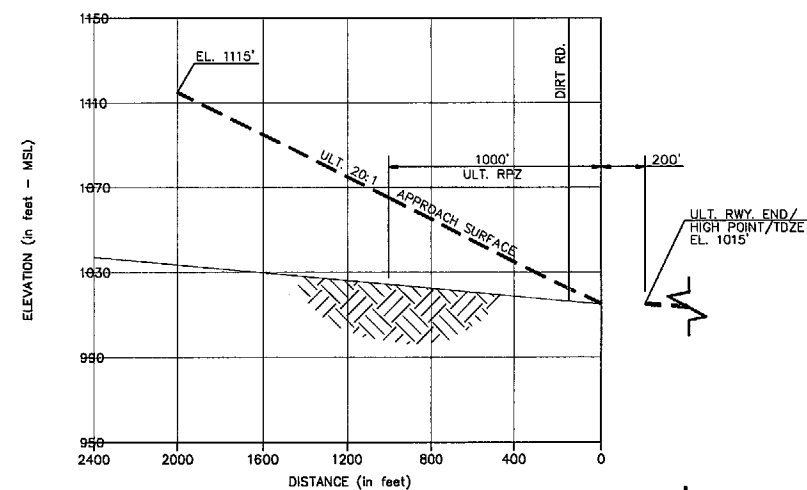
| No. | REVISIONS | DATE | BY | APPD. |
|-----|-----------|------|----|-------|
| | | | | |

PLANNED BY: Mike Smyth
 DETAILED BY: W.S. Holland
 APPROVED BY: James M. Harris, P.E.
 October 30, 1997 SHEET 3 OF 7

Coffman Associates
Airport Consultants

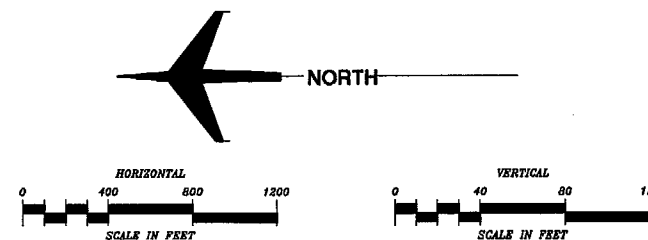


RUNWAY 17R-35L APPROACH ZONES PROFILES



GENERAL NOTES:

1. Obstructions, clearances, and locations are calculated from ultimate runway and elevations and ultimate approach surfaces, unless otherwise noted.
2. Airport contours were derived from U.S.G.S. 7.5 degree Survey Map, BUCKEYE N.W. 1982.
3. Elevations are interpolated based on U.S.G.S. contours (See Note 2). All elevations, distances and clearances are therefore subject to field survey verification.

[illegible]

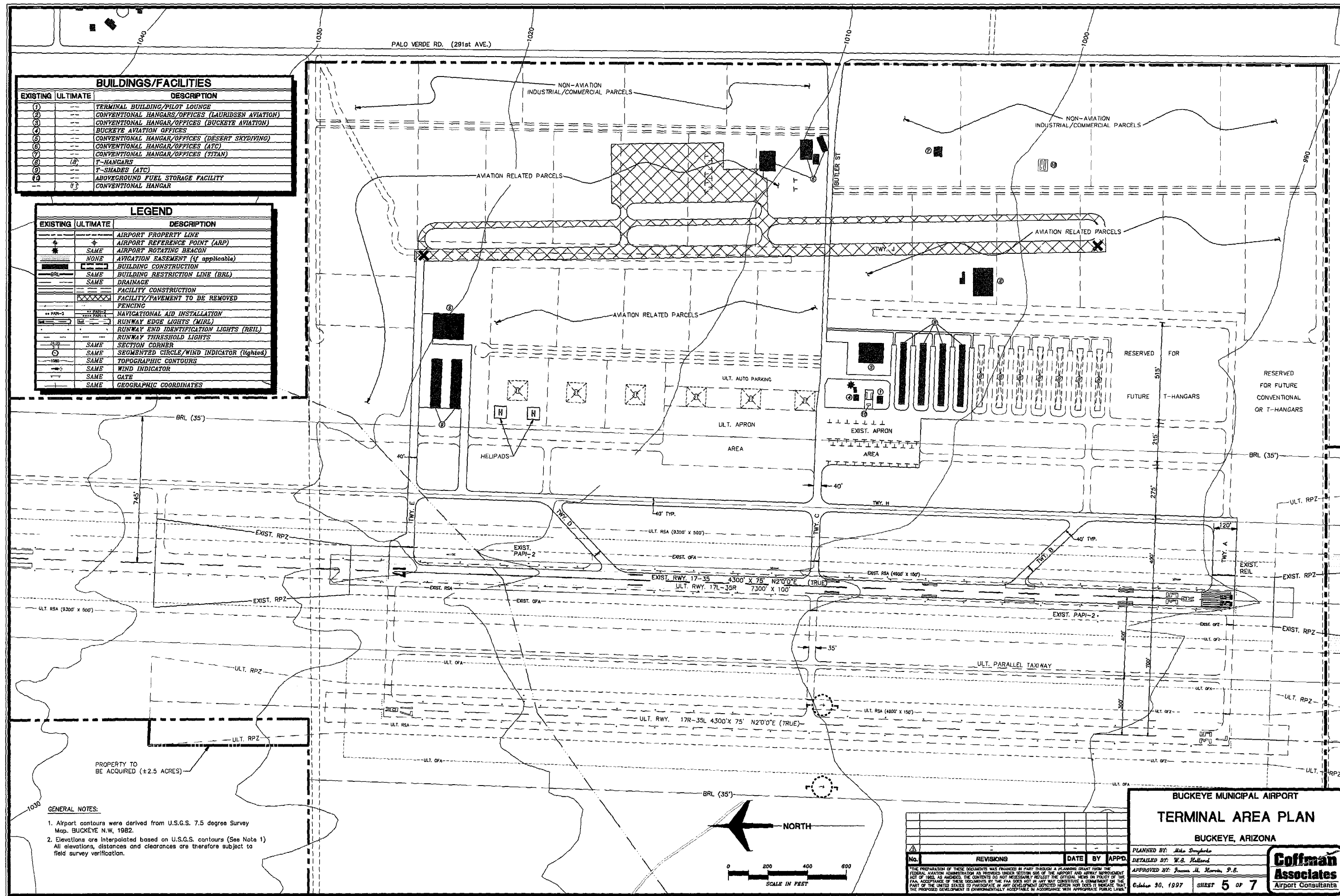
BUCKEYE MUNICIPAL AIRPORT
RUNWAY 17R-35L
APPROACH ZONES PROFILES AND
RUNWAY END AREA PLANS
BUCKEYE, ARIZONA

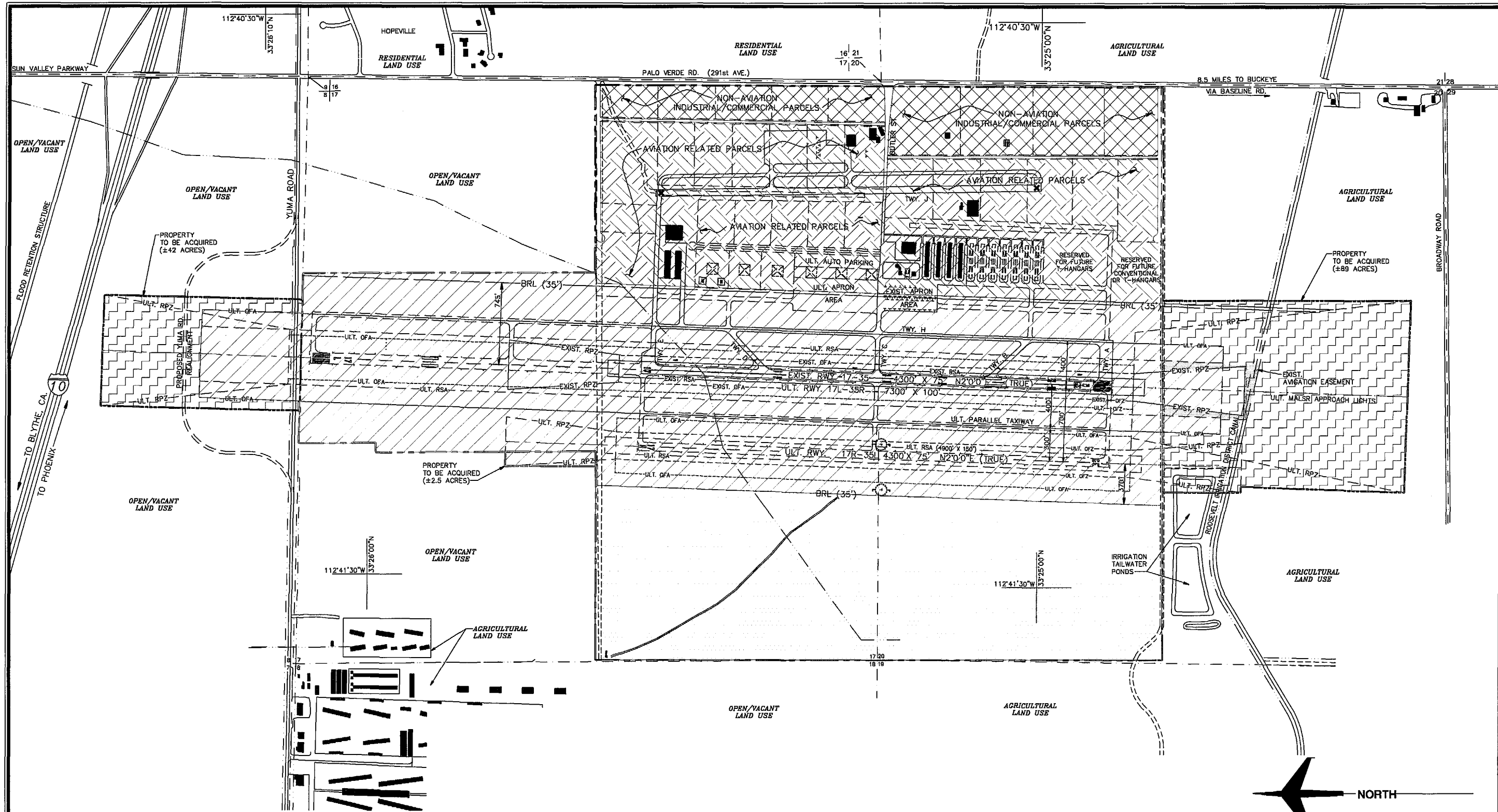
| | |
|------------------------------------|--------------|
| PLANNED BY: Mike Dmylenko | |
| DETAILED BY: W.S. Holland | |
| APPROVED BY: James M. Harris, P.E. | |
| May 22, 1997 | SHEET 4 OF 4 |

**Coffman
Associates**
Airport Consultants

| BUILDINGS/FACILITIES | | |
|----------------------|----------|--|
| EXISTING | ULTIMATE | DESCRIPTION |
| 1 | --- | TERMINAL BUILDING/PILOT LOUNGE |
| 2 | --- | CONVENTIONAL HANGAR/OFFICES (LAURIDSEN AVIATION) |
| 3 | --- | CONVENTIONAL HANGAR/OFFICES (BUCKEYE AVIATION) |
| 4 | --- | BUCKEYE AVIATION OFFICES |
| 5 | --- | CONVENTIONAL HANGAR/OFFICES (DESERT SKYDIVING) |
| 6 | --- | CONVENTIONAL HANGAR/OFFICES (ATC) |
| 7 | --- | CONVENTIONAL HANGAR/OFFICES (TITAN) |
| 8 | (a) | T-HANGARS |
| 9 | --- | T-SHADES (ATC) |
| 10 | --- | ABOVEGROUND FUEL STORAGE FACILITY |
| --- | (b) | CONVENTIONAL HANGAR |

| LEGEND | | |
|----------|----------|---|
| EXISTING | ULTIMATE | DESCRIPTION |
| --- | --- | AIRPORT PROPERTY LINE |
| --- | --- | AIRPORT REFERENCE POINT (ARP) |
| --- | --- | AIRPORT ROTATING BEACON |
| --- | --- | AVIGATION EASEMENT (if applicable) |
| --- | --- | BUILDING CONSTRUCTION |
| --- | --- | BUILDING RESTRICTION LINE (BRL) |
| --- | --- | DRAINAGE |
| --- | --- | FACILITY CONSTRUCTION |
| --- | --- | FACILITY/PAVEMENT TO BE REMOVED |
| --- | --- | FENCING |
| --- | --- | NAVIGATIONAL AID INSTALLATION |
| --- | --- | RUNWAY EDGE LIGHTS (MRL) |
| --- | --- | RUNWAY END IDENTIFICATION LIGHTS (REIL) |
| --- | --- | RUNWAY THRESHOLD LIGHTS |
| --- | --- | SECTION CORNER |
| --- | --- | SEGMENTED CIRCLE/WIND INDICATOR (lighted) |
| --- | --- | TOPOGRAPHIC CONTOURS |
| --- | --- | WIND INDICATOR |
| --- | --- | GATE |
| --- | --- | GEOGRAPHIC COORDINATES |



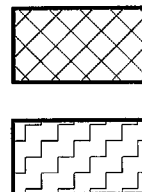


LAND USE KEY:



**AIRFIELD
OPERATIONS
(347 ACRES)**

**AVIATION
REVENUE SUPPORT
(183 ACRES)**



**NON-AVIATION
REVENUE SUPPORT
(54 ACRES)**

**OPEN SPACE/
APPROACH PROTECTION
(104 ACRES)**



**FUTURE
AVIATION RESERVE
(178 ACRES)**

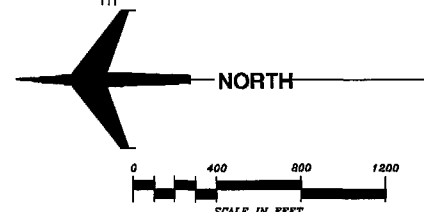
NOTE: ACREAGES ARE APPROXIMATE AND ARE INCLUDED FOR PLANNING PURPOSES ONLY.

LEGEND:



EXISTING AIRPORT PROPERTY LINE

ULTIMATE AIRPORT PROPERTY LINE



| | | | |
|------------------------------------|--|--------------|--|
| BUCKEYE MUNICIPAL AIRPORT | | | |
| ON-AIRPORT LAND USE PLAN | | | |
| BUCKEYE, ARIZONA | | | |
| PLANNED BY: Mike Smyth | | | |
| DETAILED BY: W.B. Holland | | | |
| APPROVED BY: James M. Harris, P.E. | | | |
| October 30, 1997 | | SHEET 6 OF 7 | |

| REVISIONS | | | | DATE | BY | APPD. |
|-----------|--|--|--|------|----|-------|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |

THE PREPARATION OF THESE DOCUMENTS WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 106 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982. THE CONTENTS OF THESE DOCUMENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THESE DOCUMENTS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT PROJECT HEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE FEDERAL LAWS.

